

How To Create A Multi-Version Bootable Windows 7 USB Drive

This is a step by step tutorial showing how to create a multi-version bootable Windows 7 USB drive. You can use the quick jump menu to skip to the part you are interested in.

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Why Do I Need To Use A USB Drive?

There are a variety of reasons for needing to use a USB drive.

1. You may have a modern netbook style computer which doesn't have a DVD drive, so you are unable to [format your hard drive with Windows](#) DVD. Of course, you could use a portable DVD burner for this.
2. You may not have a Windows disc, or your original disc is damaged. Not to worry, a Windows license is all you need, you can download a genuine copy of Windows for free.. the license is all you need to make it legal.
3. You may wish to make a superfast installation. Installing from a USB takes less than half the time to install Windows compared to a DVD !!

Manual Installation VS Free Software

There is a variety of free software available to create a USB installation for you.

However, all of these applications can and do regularly come up with errors, depending on various things like the settings in your bios, hardware conflicts, or even corrupted files within the software itself. Some of them also require other software to be preinstalled on your computer

It can be quite aggravating when you go through the process, begin your Windows installation, and 20 minutes into your installation suddenly hit an error which means you have to start again!

The most reliable way to create a USB installation medium is to do it yourself. Despite what you may think, this is actually simpler and faster than using software to do it!

Today we are going to demonstrate how to manually make a USB drive bootable and copy Windows installation files on to it. You'll then be able to boot to this USB and install Windows without using a disc drive.

What You Will Need To Create A Bootable Windows 7 USB Drive From Disc

1. A working WINDOWS computer. It doesn't need to be running [Windows 7](#), it could be [Vista](#) or [XP](#) if that's all you have. You can use the computer you plan to reinstall too.
2. A USB flash drive (a.k.a USB dongle or even USB stick) with a capacity of 8GB or more.
3. You'll be wiping this drive before use, so make sure you have saved any files on it onto another computer, USB drive or external hard drive FIRST !!
4. A clean, genuine copy of your desired version of Windows.

What You Will Need To Create A Bootable Windows 7 USB Drive From A Download

1. A working WINDOWS computer. It doesn't need to be running Windows 7, it could be Vista or XP if that's all you have. You can use the computer you plan to reinstall too.
2. A USB flash drive (a.k.a USB dongle or even USB stick) with a capacity of 8GB or more.
3. You'll be wiping this drive before use, so make sure you have saved any files on it onto another computer, USB drive or external hard drive FIRST !!
4. A downloaded safe genuine and legal copy of 64 bit Windows 7. (Click [HERE](#) to download)
5. If you plan on using a downloaded file, you'll need a program capable of unpacking a .iso file such as the free and excellent 7-Zip. (Click [HERE](#) to download)

NOTE: If you plan on making your USB installation from a genuine disc, you aren't going to need this download of Windows or 7 zip.

We are going to show you how to use both a disc and a downloaded file to do this.

There are 8 commonly used versions of Windows 7 available – Starter Edition, Home Premium, Professional, and Ultimate, each in 32 bit or 64 bit form. We will only deal with

the 64bit version in this tutorial, as your computer, if it came from the factory with Windows 7 installed, will almost certainly either have come with a 64bit operating system, or is at least capable of using it.

A 64bit operating system is far superior to 32bit for multiple reasons which we will cover in another tutorial sometime.

Which Windows Version Do You Need?

Well, this depends on which version you have a license for !!

Windows can be installed and run for 30 days for free, but you'll be asked regularly to 'activate Windows', and to do this you need a 25 character **KEY**(license). If you are reinstalling Windows onto a computer which has a legal copy already installed, you'll find the **KEY** on a sticker on the computer somewhere. It's a 25 character combination of letters and numbers, divided into 5 groups.

It will look something like this.. W4R5T-FFG5D-K45CC-LE484-QW89I .. please note this is an example and NOT a valid Windows **KEY**.

If you plan to download your copy, please be sure to download Windows only from the links provided, to get a safe, genuine copy of Windows. We strongly advise against downloading Windows from torrent sites, as these are often doctored to illegally activate Windows automatically, and often contain malware as well.

Now, here's a little bit of information for you. **Despite what I've just said.. there are in reality only TWO copies of Windows.** These are the **32 bit** copy, and the **64 bit** copy. Although there is a long list of available downloads/discs , they are all basically identical.

Each of these copies contain all four versions of Windows – Starter Edition, Home Premium, Professional and Ultimate. The only difference between each copy is a small file called ei.cfg, which determines which copy is installed. We are going to show you how to alter the version which is installed, depending on which **KEY** you are using.

Your **KEY** will be suited to activate a **VERSION** of Windows 7, but you can choose either **32bit** or **64bit**, the **KEY** will work on either.. so long as you are installing the correct **VERSION** – Home Premium, Professional, or Ultimate – to suit your **KEY**.

If your computer is less than 5 years old, you will almost certainly be wanting to use the 64bit version.

Have you downloaded 7-zip? Have you downloaded Windows, or have a genuine Windows disc ready to use?

Do you have a USB drive plugged into your computer?

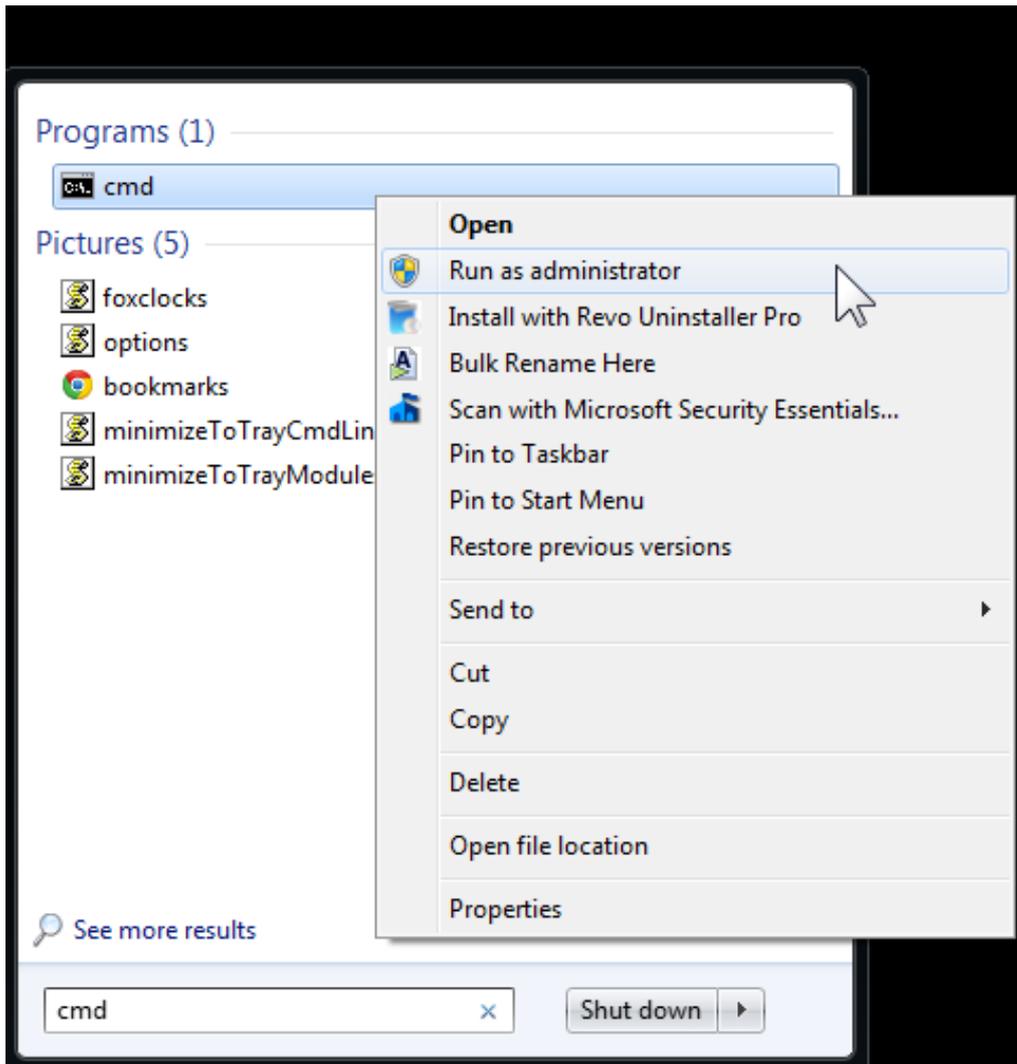
Let's go

Formatting The USB Drive To Make It Bootable

You may think this is a little daunting, as you will be using the Windows Command Console, which most users have no clue how to use.

Just follow the instructions step by step and this method is **EASIER** and **FASTER** than any software method you could use.

1. First you'll need to open a command window. Click on the start button and type into the search panel **cmd**
2. The top option will be the one you need. Right click on it and '**run as administrator**'



3. Now you'll be able to format the drive. Please be sure to insert spaces where you see spaces, and none where you see none. Do not deviate, type it **EXACTLY** as you see it. Use lower case for all, no capital letters.

You'll see the process on the screenshot below, but here, in order, is what you will type, **EXACTLY** as you see it, except you will need to change the disk number from # to the appropriate number corresponding to your USB drive. So if your USB drive is e then replace # with the letter e.

Press Enter after each step

Refer to the screenshot below if you get confused.

- **diskpart**
- *enter*
- **list disk**
- *enter*
- **select disk #**
- *enter*
- **clean**
- *enter*
- **create part primary**
- *enter*
- **select partition 1**
- *enter*
- **active**
- *enter*
- **format fs=ntfs quick**
- *enter*
- **assign**
- *enter*
- **exit**
- *enter*
- **exit**

Here's what it will look like on your screen. After you have typed the last '**exit**' the command window will close.

[See a larger view of this screenshot on our Facebook page.](#)

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The USB drive will be the smallest drive. disk 3 is listed as MB, the others are listed as GB, so disk 3 is the smallest.

selecting the USB drive for preparation

preparing the drive for formatting

creating a partition

selecting the partition you've just created

mark the partition as active

formatting the partition this will take a minute or so

assign a drive letter (windows cant use an unnamed drive)

when you perform this action, an extra window will pop up under the command window. Just leave it there and ignore it for now

exit once, to close diskpart, then again, to close this command window

```

Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 6.1.7601
Copyright (c) 1999-2008 Microsoft Corporation.
On computer: TIPS4PC

DISKPART> list disk

Disk ###  Status         Size      Free      Dyn  Gpt
-----  -
Disk 0    Online         931 GB    0 B
Disk 1    Online         465 GB    0 B
Disk 2    Online        1563 GB   1824 KB
Disk 3    Online         7644 MB   7643 MB

DISKPART> select disk 3
Disk 3 is now the selected disk.

DISKPART> clean
DiskPart succeeded in cleaning the disk.

DISKPART> create part primary
DiskPart succeeded in creating the specified partition.

DISKPART> select part 1
Partition 1 is now the selected partition.

DISKPART> active
DiskPart marked the current partition as active.

DISKPART> format fs=ntfs quick
100 percent completed
DiskPart successfully formatted the volume.

DISKPART> assign
DiskPart successfully assigned the drive letter or mount point.

DISKPART> exit
Leaving DiskPart...

C:\Windows\system32>exit
  
```

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Way to go !! You've now created a bootable USB drive.

Adding Windows Files To Your Bootable Usb

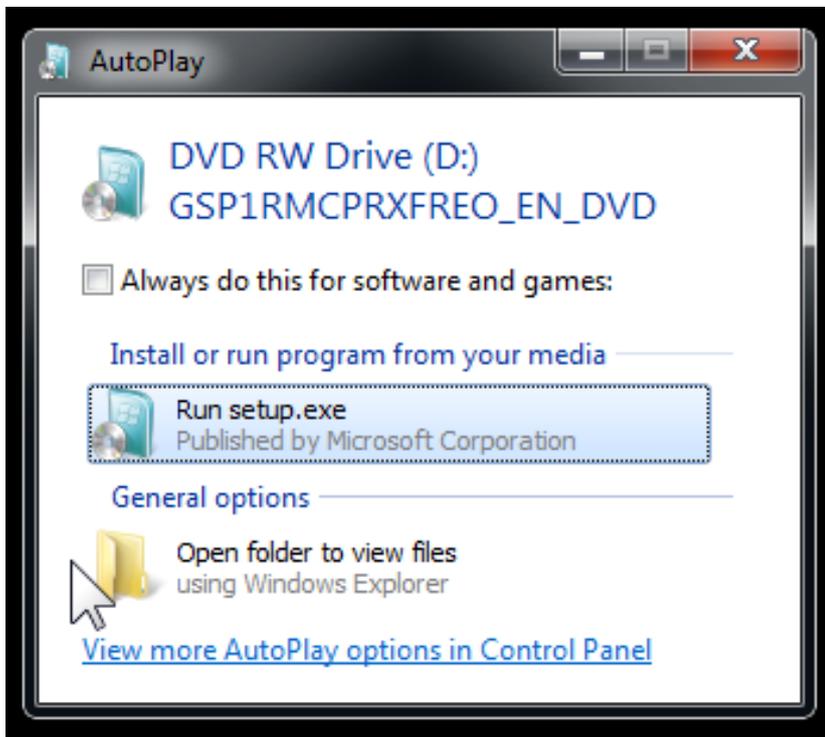
OK, so now we have a bootable USB and we need to add the installation files to it.

There are two ways of doing this. We can either use an original Windows disc, or a downloaded .iso file. There is no difference in using either, with the possible exception that if your DVD is an older one, it may not include Service Pack One. If that's the case, its no big deal, you'll just find that once installed Windows will automatically download and install Service Pack One anyway.

The linked .iso file near the beginning of this article is for Windows 7 Ultimate, with Service Pack One included. Your key isn't for Ultimate? Hey, no problem. We'll show you how to deal with that very soon.

So, for a DVD installation, first you'll need to open the DVD. Insert the DVD into the burner on the computer you are using, if it has one. If it hasn't, skip past this to the instructions for using a downloaded file instead.

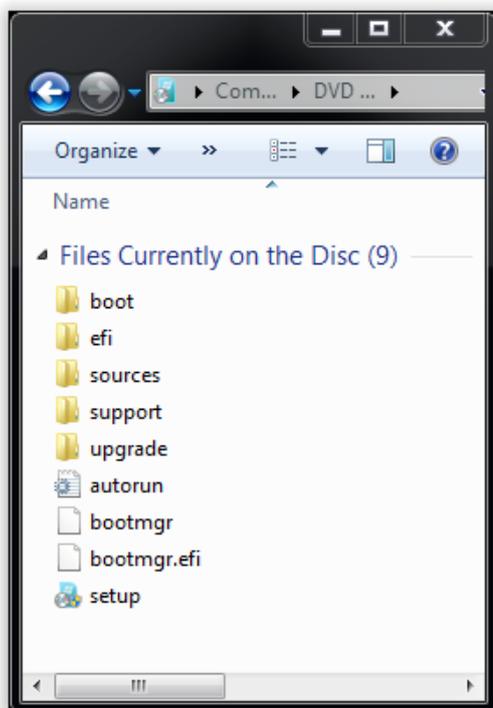
You'll see that by default, its suggesting you should 'Run setup.exe'. This isn't what you want to do !! Instead, click on 'Open folder to view files'



Do that, and you will see the installation files for Windows.

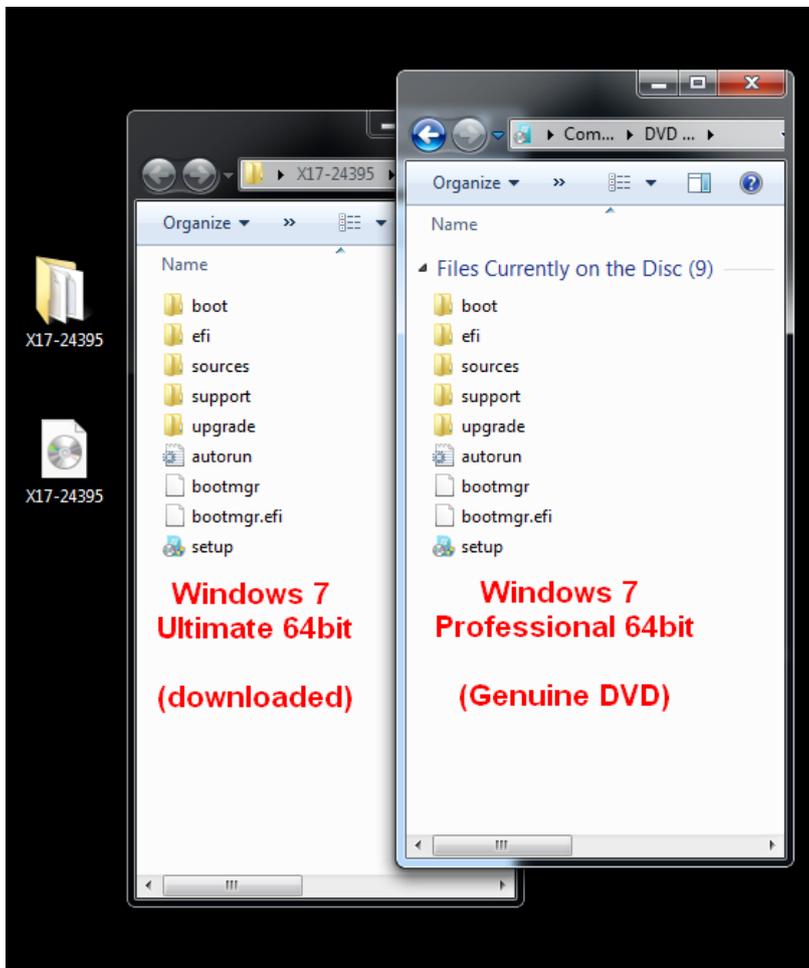
The disc I've opened here is for Windows 7 Professional. What's that you say? But you would have me download Windows Ultimate? Why is this?

Read on...



This is why.. they are exactly the same !!!

There is actually one subtle difference, something you will need to change and we'll show you that soon.



OK, so now you know how to view the files on your DVD. If you're using this method, you can skip past the next little section, which shows how to extract a downloaded file instead.

If you have downloaded Windows instead, via the link at the top of this article, then the process is a little different. Remember, you were asked to install a program called 7-zip? The link was provided at the same place on the top of the article where the Windows link is.

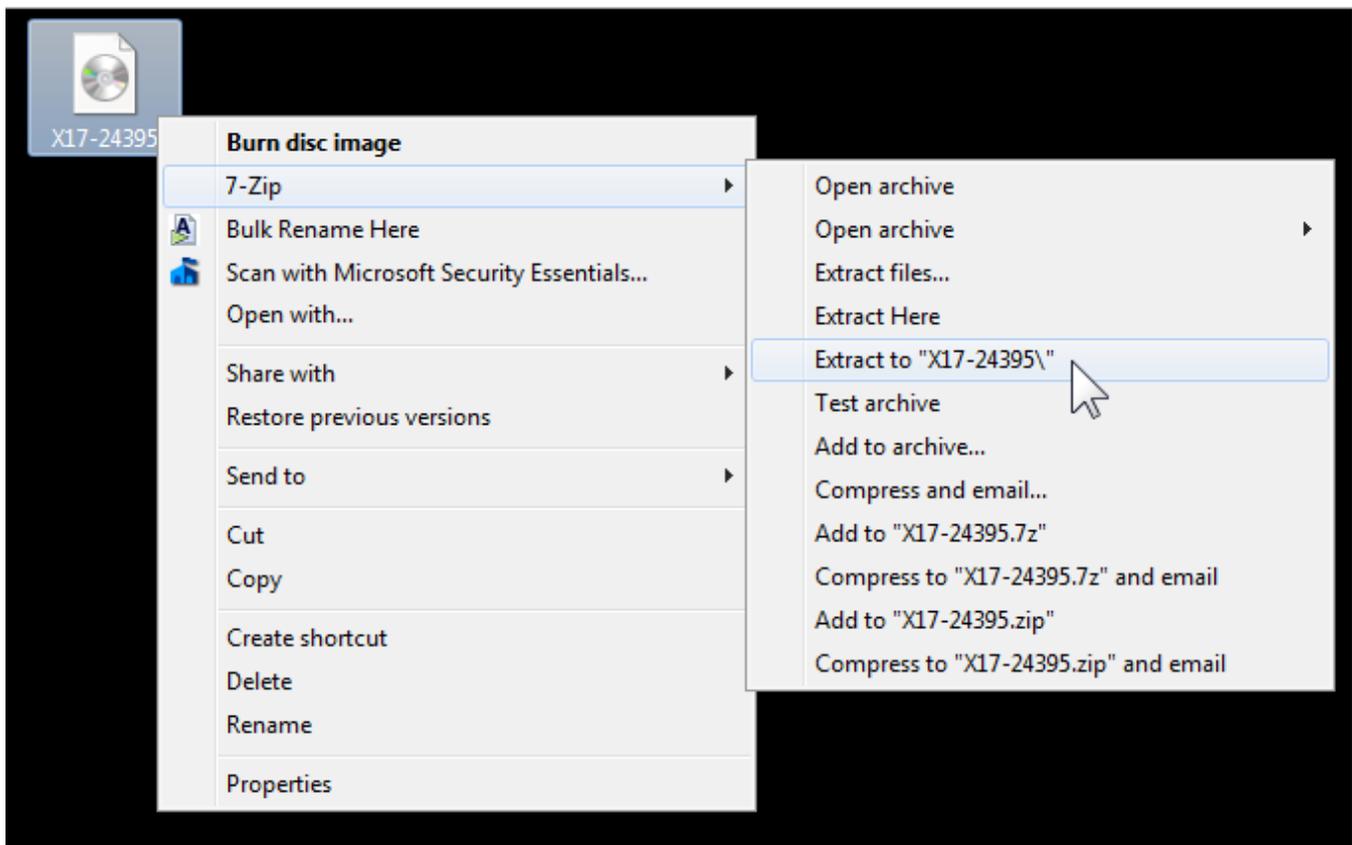
We will assume you have installed it.

To use the downloaded .iso file, there are two options. You can burn the file directly to a disc and use that.. but this article is about creating a bootable USB, so we will go with the second option.

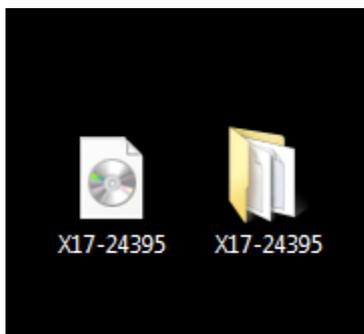
First, you'll need to unpack(extract) the files from the downloaded .iso file.

Right click on the downloaded file.

Choose the option as pictured. This will create a new folder in the same location your .iso file is located. If you choose 'extract here' then the files will be unpacked loosely, its just easier to unpack them into their own folder.

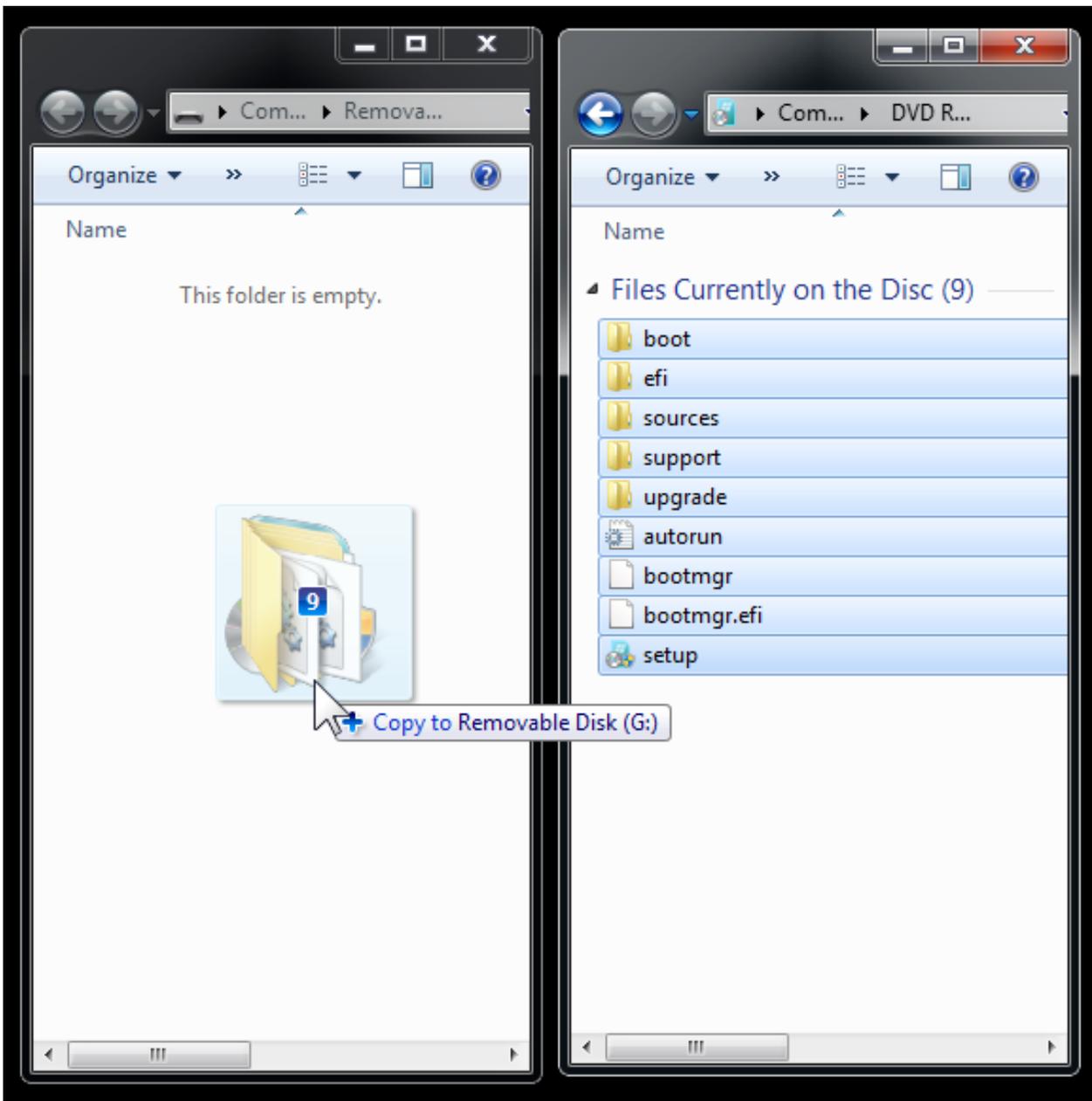


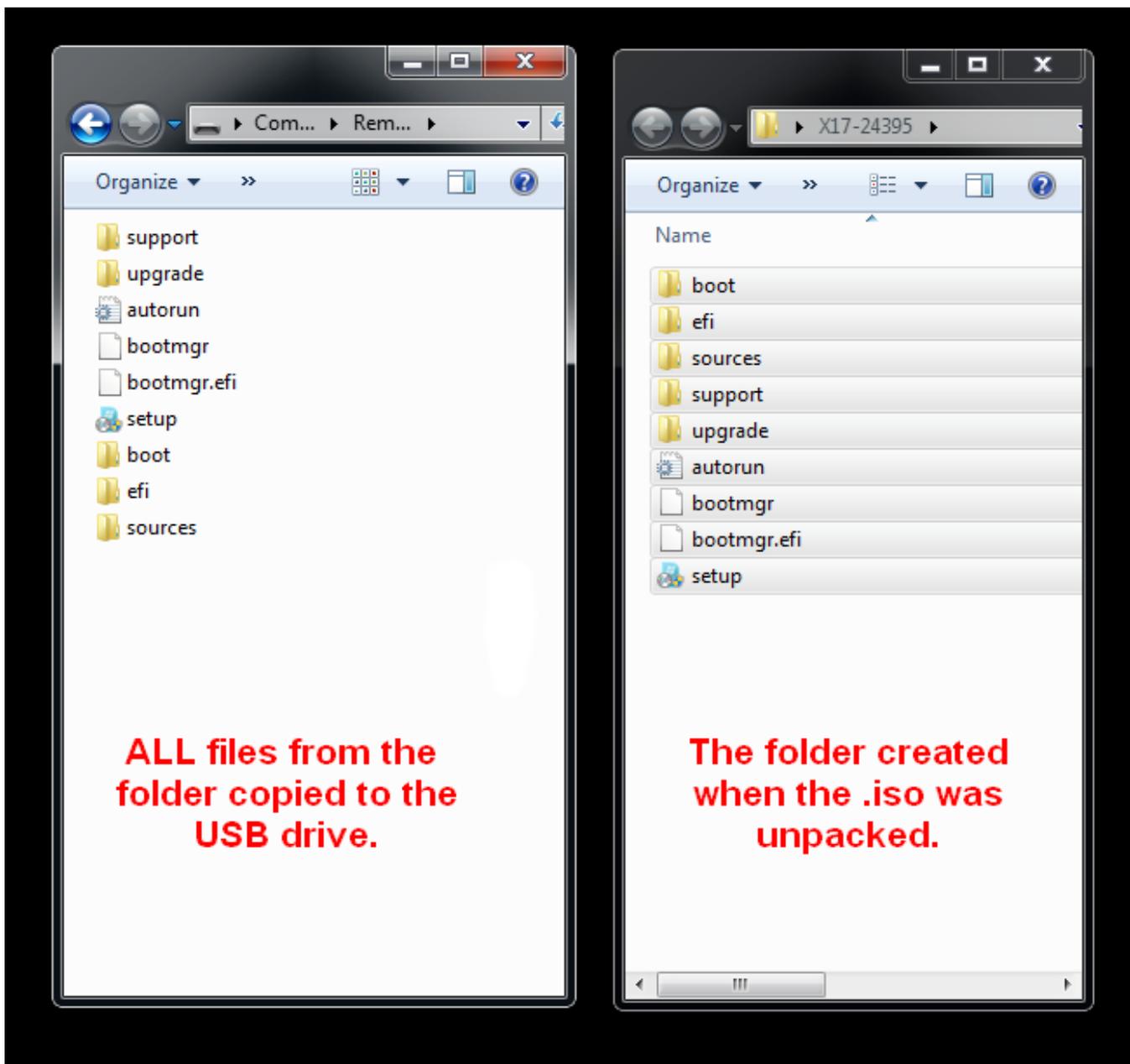
Now you'll have this..



Open the newly created folder, and you'll see the files needed to install Windows. All you need to do is copy ALL of these files onto your previously created Bootable USB Drive.

THE FOLDER YOU ARE COPYING HERE WILL BE EITHER YOUR OPENED DVD, OR THE UNPACKED .ISO FILE. IF YOU ARE USING A DVD AND HAVE SKIPPED THE LAST BIT, THIS IS WHERE YOU COME BACK.





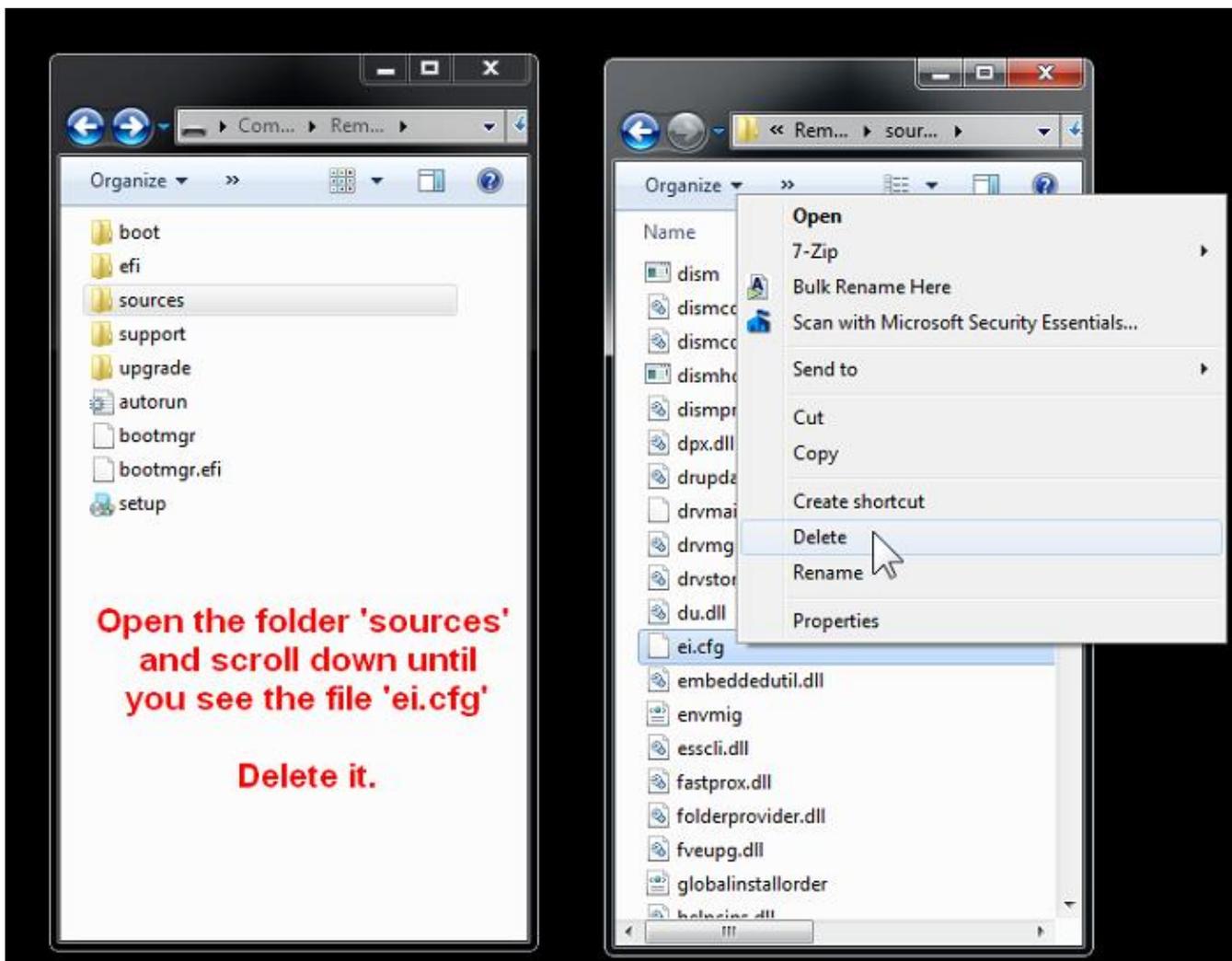
OK, you now have a bootable Windows installation !!!

BUT

remember, we have downloaded a copy of Windows Ultimate !! What if you actually want Windows Home Premium?

Remember we said that all copies are the same, but with a single subtle difference? The difference is a single file within the 'sources' folder, which tells the installation which file to install. Its called 'ei.cfg'.

You'll want to delete this file completely. By doing so, you'll be offered when installing Windows the option of which version you want to install. Options will include all versions of Windows, including Windows Starter Edition, Home Premium, Professional, or Ultimate. You simply need to choose the one your KEY is suited to.



Congratulations, you're done !!

Your USB is now a bootable, multi-version Windows 7 64bit installation.

You can now either leave it in the computer, if this is the computer you will be using it on, and reboot, booting to the USB drive.

If you are going to use it on a different computer, then remove the USB drive and insert it into the other computer. Make sure the computer boots to the USB drive.

Some Things To Note:

When installing Windows, you will be offered a few options. Choose custom (new) installation when you are asked what you want to do.

Choose your appropriate VERSION of Windows when asked to.

Lastly, when installing, the computer will reboot several times. When it shuts down to reboot the FIRST time, remove the USB drive while its rebooting. You don't want it to boot to the USB drive again, or the installation will begin again. If this happens, don't panic!! Just hold the power button down until the computer shuts off, remove the USB drive, and restart it. All will be well.

You'll be able to use this USB drive on multiple computers if you like. You simply need to choose which version you have a KEY for on whichever computer you are installing.

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Regards

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